

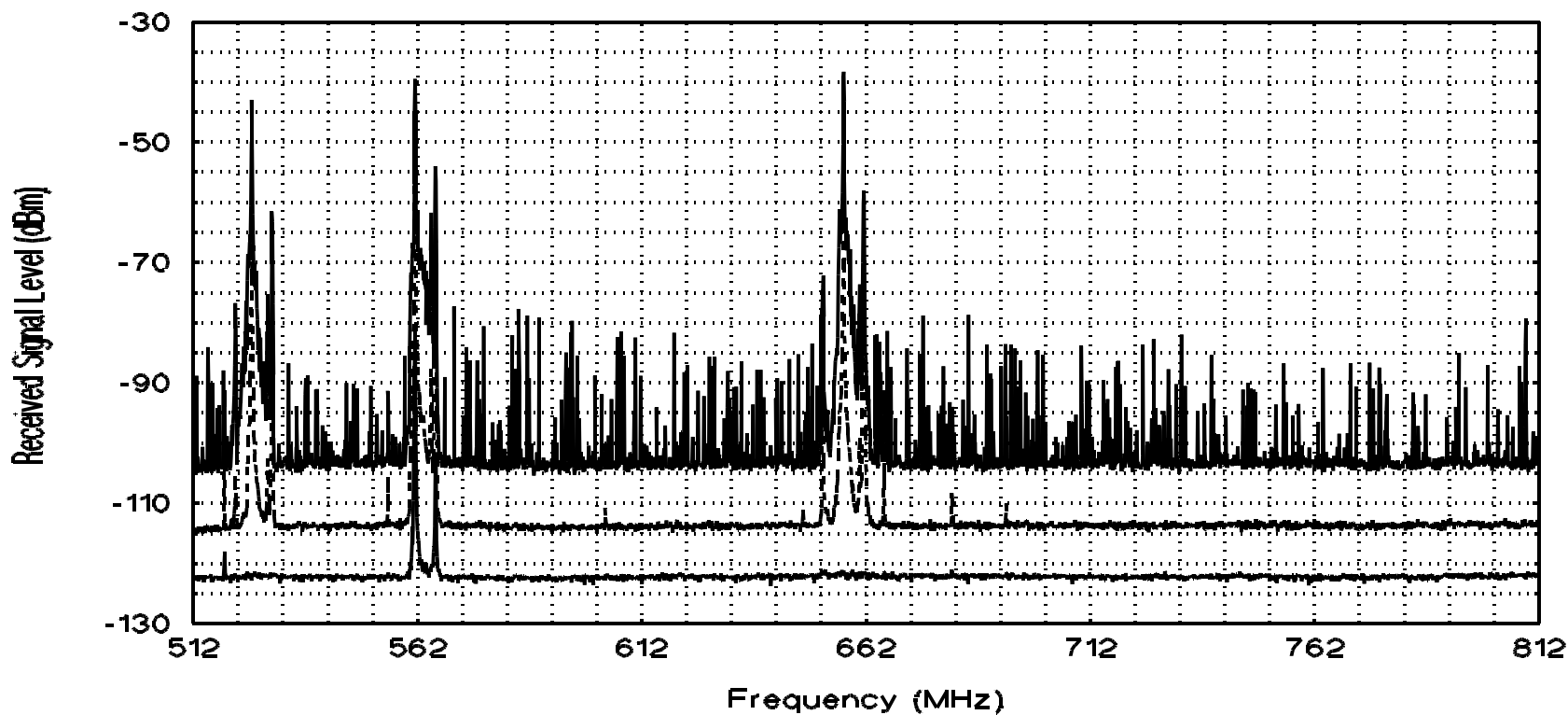
GOVERNMENT ALLOCATIONS:		1.		
NON-GOVERNMENT ALLOCATIONS:	BROADCASTING.	1.	BROADCASTING.	
GENERAL UTILIZATION:	TV Channels 21-36.		TV Channels 38-69.	

512

608-614

806

B-19



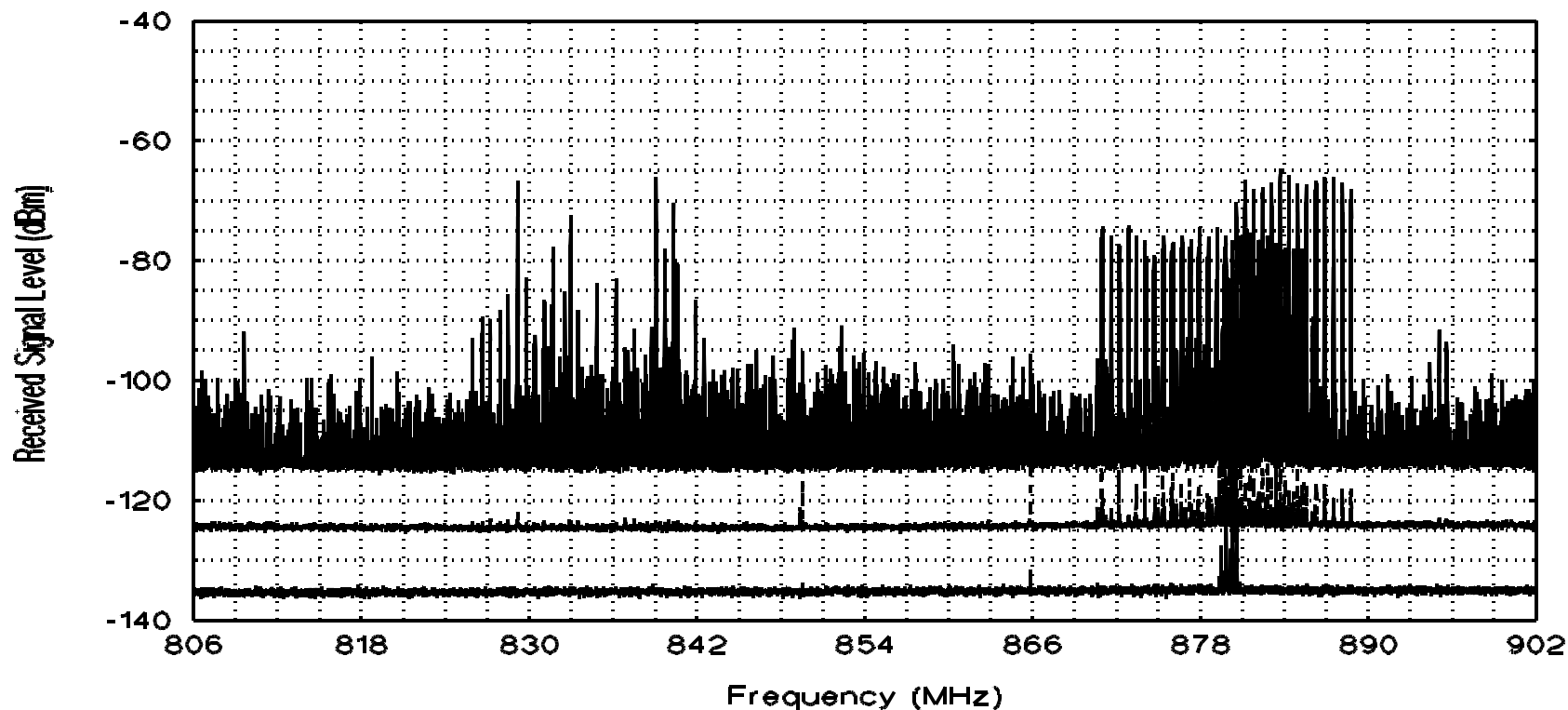
1. RADIO ASTRONOMY. No stations are authorized to transmit in this band.

Figure B-11. NTIA spectrum survey graph summarizing 2,600 sweeps across the 512-806 MHz range (System-1, band event 21, swept/m3 algorithm, sample detector, 100-kHz bandwidth) at Eureka, CA, 1995.

GOVERNMENT ALLOCATIONS:										
NON-GOVERNMENT ALLOCATIONS:	LAND MOBILE, 1.									
GENERAL UTILIZATION:	Conventional and Trunked (mobile).	2.	Cellular Systems (Public Mobile).	4.	Conventional and Trunked (base).	3.	Cellular Systems (Public Base).	5.	6, 7.	

806                      821-824                      849-851                      866-869                      894-896                      902

B-20



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| 1. 806-890 MHz: Limited allocation is available for TV Channels 70-83. | 5. Aeronautical Mobile (air-to-ground).                        |
| 2. Public Safety (mobile).   | 6. 896-901 MHz: Private Land Mobile (paired with 935-940 MHz). |
| 3. Public Safety (base).   | 7. 901-902 MHz: General Mobile.                                |
| 4. Aeronautical Mobile (ground-to-air).                                |  |

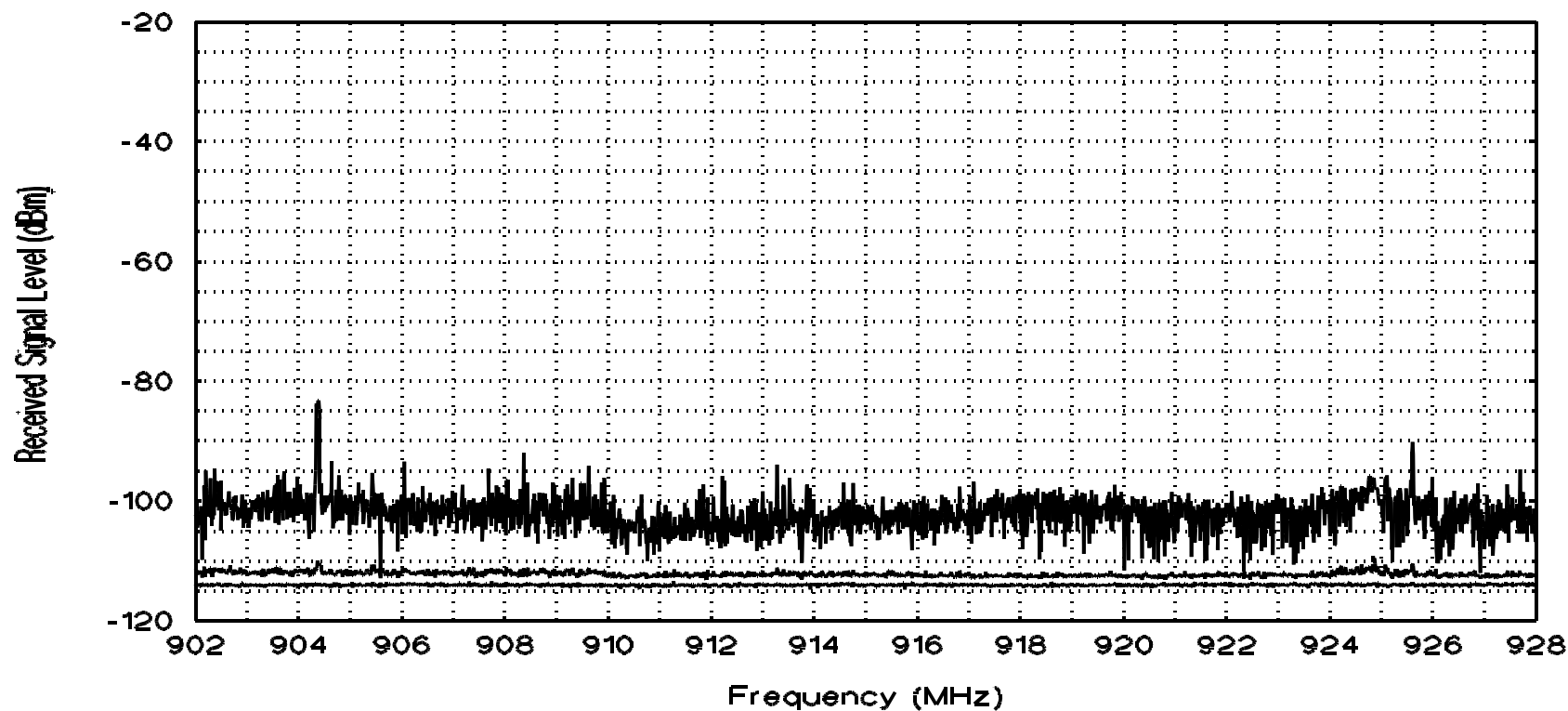
Figure B-12. NTIA spectrum survey graph summarizing 1,680 sweeps across the 806-902 MHz range (System-1, band event 22, swept/m3 algorithm, sample detector, 10-kHz bandwidth) at Eureka, CA, 1995.

GOVERNMENT ALLOCATIONS:	RADIOLOCATION.	
NON-GOVERNMENT ALLOCATIONS:		
GENERAL UTILIZATION:	Military radiolocation systems, industrial, scientific, and medical (ISM) devices, Automatic Vehicle Monitoring (AVM), spread spectrum devices, microwave ovens, digital communications, repeaters, 1.	

902

928

B-21



1. Fixed and Mobile radio services are permitted on a secondary basis; however, band utilization is increasing for non-Government ISM, spread spectrum and other modes, amateur, etc., as permitted in Region 2.

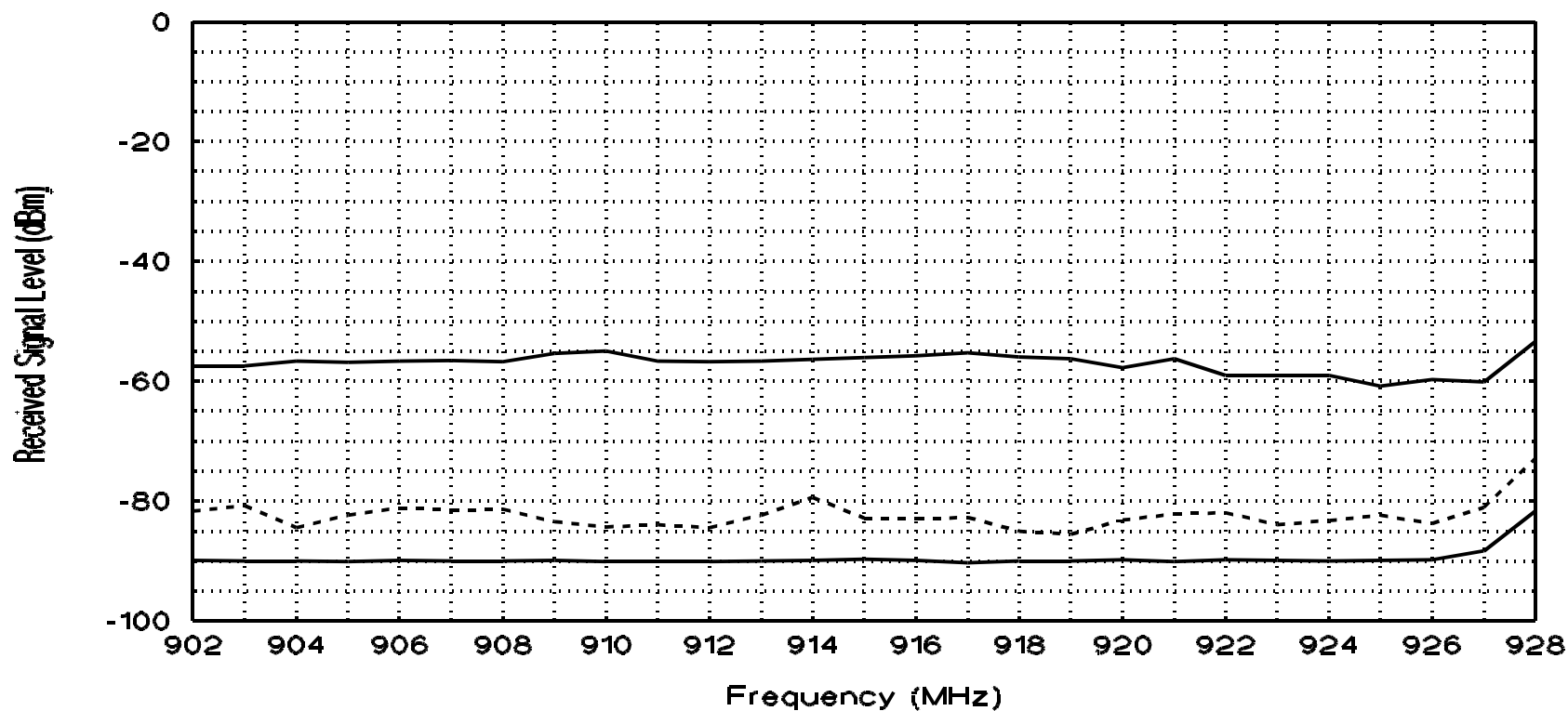
Figure B-13. NTIA spectrum survey graph summarizing 16,200 sweeps across the 902-928 MHz range (System-1, band event 23, swept algorithm, maximum-hold detector, 10-kHz bandwidth) at Eureka, CA, 1995.

GOVERNMENT ALLOCATIONS:	RADIOLOCATION.	
NON-GOVERNMENT ALLOCATIONS:		
GENERAL UTILIZATION:	Military radiolocation systems, industrial, scientific, and medical (ISM) devices, Automatic Vehicle Monitoring (AVM), spread spectrum devices, microwave ovens, digital communications, repeaters, 1.	

902

928

B-22

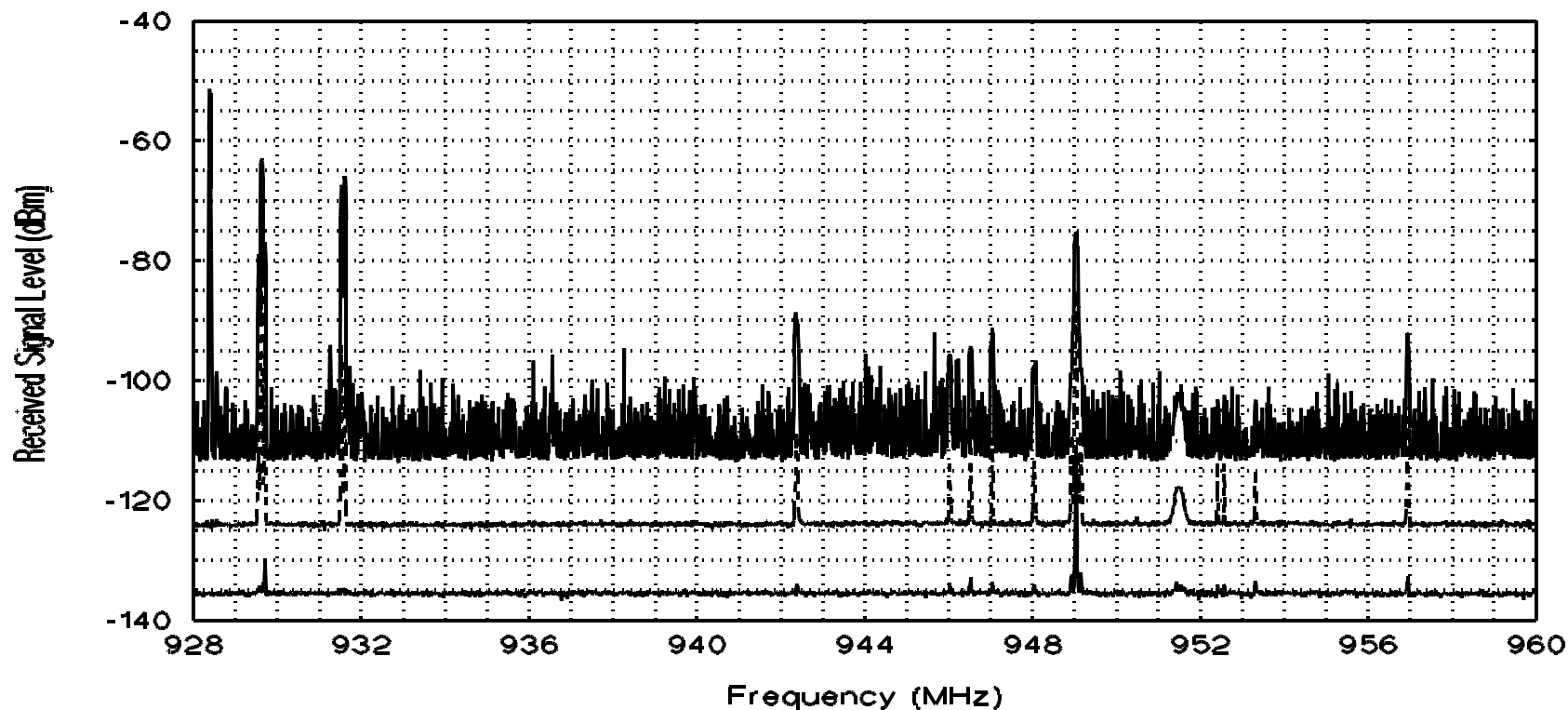


1. Fixed and Mobile radio services are permitted on a secondary basis; however, band utilization is increasing for non-Government ISM, spread spectrum and other modes, amateur, etc., as permitted in Region 2.

Figure B-14. NTIA spectrum survey graph summarizing 24 scans across the 902-928 MHz range (System-1, band event 24, stepped algorithm, +peak detector, 1000-kHz bandwidth) at Eureka, CA, 1995.

GOVERNMENT ALLOCATIONS:			FIXED.			FIXED.		
NON-GOVERNMENT ALLOCATIONS:	1.	LAND MOBILE	FIXED.	LAND MOBILE.	5.	FIXED.	FIXED.	
GENERAL UTILIZATION:	1.	2.	3.	Private land mobile (base), 4.		3.	Auxiliary broadcasting, private fixed microwave, studio-to-transmitter links (STL's), 6.	
	928-929	932	935	940-941	944		960	

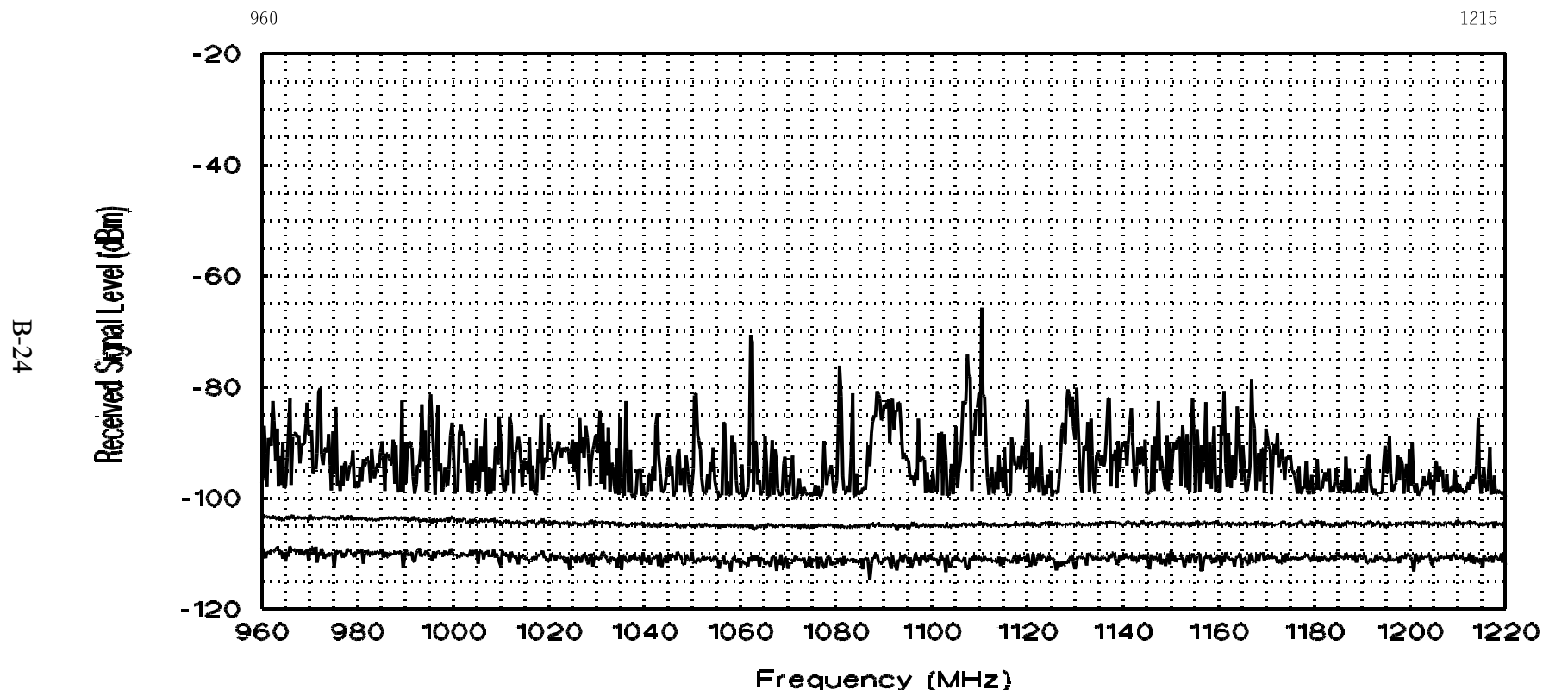
B-23



1. FIXED. Private fixed microwave, public and private land mobile, telemetry applications. Two-way services paired with 952-953 MHz.
2. Public and private land mobile.
3. Paired band for point-to-point and point-to-multipoint communications.
4. Trunked and conventional systems in 12.5 kHz channels (paired with 896-901 MHz).
5. MOBILE.
6. 944-952 MHz: Primarily STL's. 952-953 MHz paired with 928-929 MHz. 953-960 MHz: Primarily, fixed point-to-point communications.

Figure B-15. NTIA spectrum survey graph summarizing 11,400 sweeps across the 928-960 MHz range (System-1, band event 25, swept/m3 algorithm, sample detector, 10-kHz bandwidth) at Eureka, CA, 1995.

GOVERNMENT ALLOCATIONS:	AERONAUTICAL RADIONAVIGATION, 1.	
NON-GOVERNMENT ALLOCATIONS:	AERONAUTICAL RADIONAVIGATION, 1.	
GENERAL UTILIZATION:	TACAN, DME, MLS, ATCRBS, MODE-S, T-CAS, JTIDS, 2.	



1. The 960-1215 MHz band is reserved on a worldwide basis for the use and development of electronic aids to air navigation. On a case by case basis, Government systems utilizing spread spectrum techniques for terrestrial communication, navigation and identification may be authorized on condition that aeronautical radionavigation services not experience harmful interference.
2. Tactical Air Navigation (TACAN). Distance Metering Equipment (DME). Microwave Landing System (MLS). Air Traffic Control Radar Beacon system (ATCRBS), (MODE-S, IFF, etc.). Collision Avoidance System (T-CAS). Joint Tactical Information Distribution System (JTIDS).

Figure B-16. NTIA spectrum survey graph summarizing 3,500 sweeps across the 960-1215 MHz range (System-2, band event 05, swept/m3 algorithm, +peak detector, 300-kHz bandwidth) at Eureka, CA, 1995.

GOVERNMENT ALLOCATIONS:	RADIOLOCATION. 1.	RADIOLOCATION.	AERONAUTICAL RADIONAVIGATION. Radiolocation.	FIXED, MOBILE, RADIOLOCATION.	
NON-GOVERNMENT ALLOCATIONS:		Amateur.	AERONAUTICAL RADIONAVIGATION.		
GENERAL UTILIZATION:	2, 3, 4.	3, 4, 5.	3, 4.	3, 6, Fixed and Mobile links.	

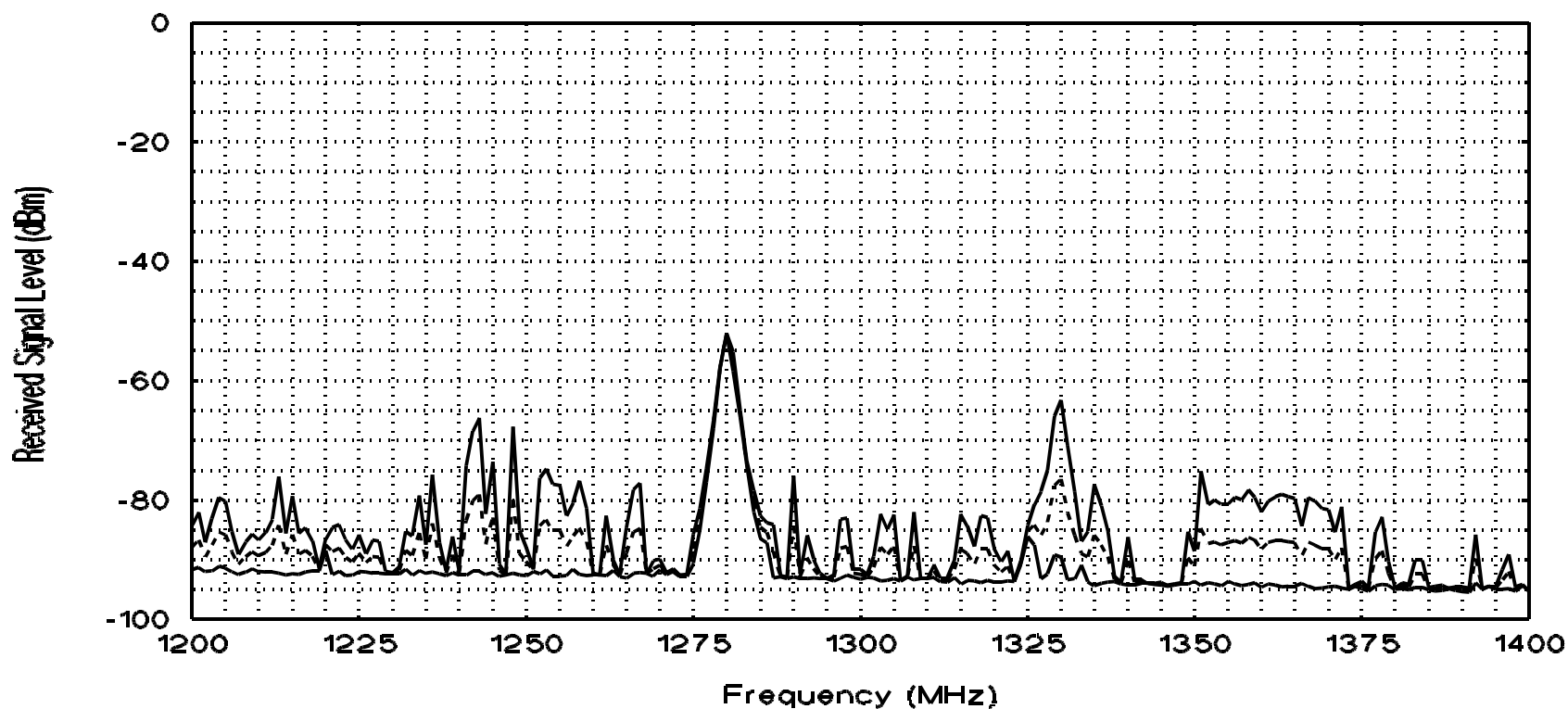
1215

1240

1300

1350

1400

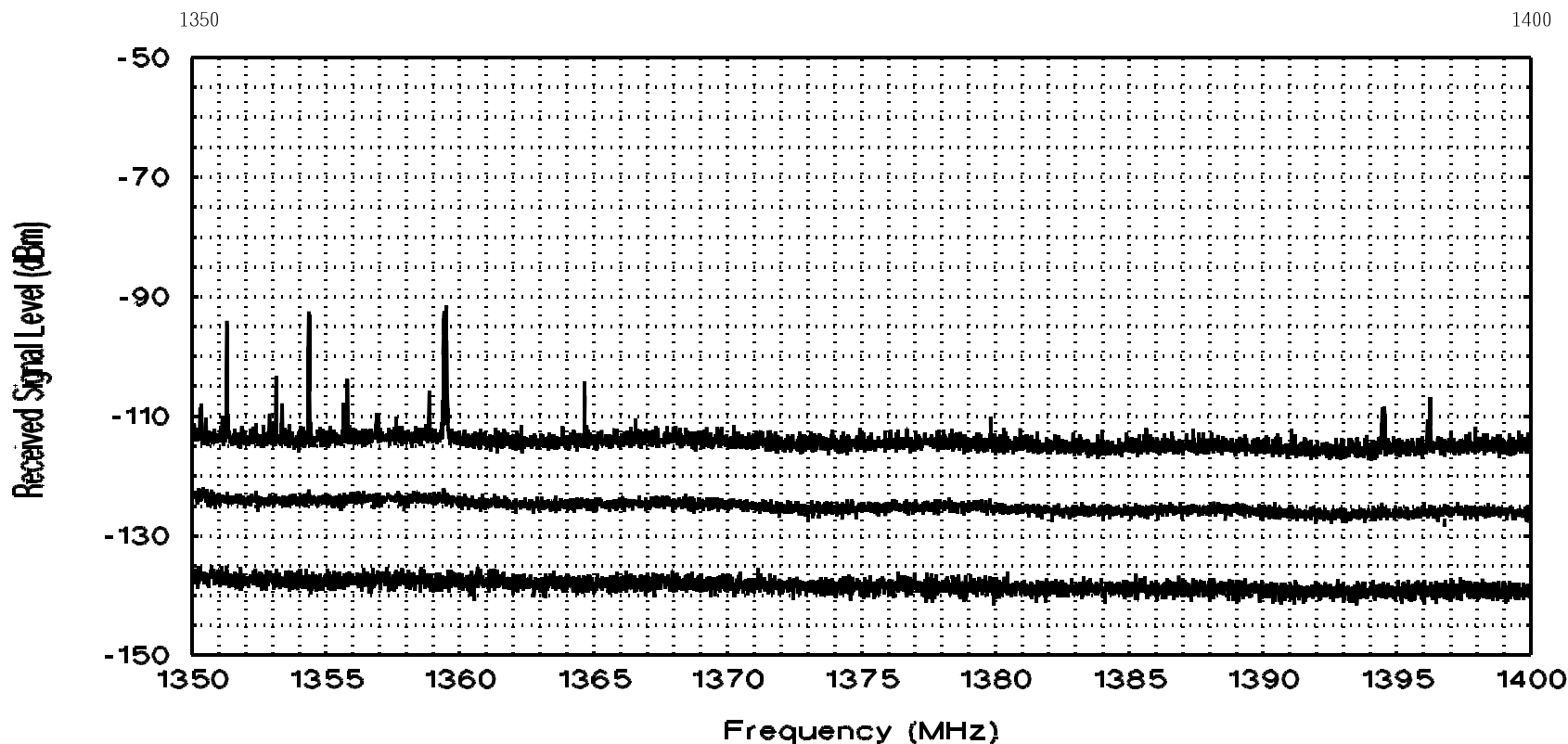


1. RADIONAVIGATION-SATELLITE (space-to-Earth).
2. 1227.6 MHz: Global Positioning System (GPS).
3. High-power long-range surveillance radars including FAA Air-Route Surveillance Radar (ARSR).
4. Tethered balloon mounted radar for drug interdiction.
5. Amateur television. Amateur weak signal modes and other modes. Amateur satellite (Earth-to-space).
6. 1381.05 MHz: GPS data relay.

Figure B-17. NTIA spectrum survey graph summarizing two scans across the 1215-1400 MHz range (System-2, band event 06, stepped algorithm, +peak detector, 1000-kHz bandwidth) at Eureka, CA, 1995.

GOVERNMENT ALLOCATIONS:	FIXED, MOBILE, RADIOLOCATION, 1.	
NON-GOVERNMENT ALLOCATIONS:	1.	
GENERAL UTILIZATION:	Military radiolocation, fixed and mobile links, GPS, aeronautical radionavigation, 2, 3.	

B-26



1. 1350-1370 MHz: AERONAUTICAL RADIONAVIGATION (allocation for U.S. and Canada only).
2. Military radiolocation applications are primarily high-power long-range surveillance radars.
3. 1369.05-1393.05 MHz: Fixed and mobile satellite services (space-to-Earth) for the relay of nuclear burst data. GPS operates at 1381.05 MHz to relay data detected by orbiting satellites.

Figure B-18. NTIA spectrum survey graph summarizing 800 sweeps across the 1350-1400 MHz range (System-2, band event 07, swept/m3 algorithm, sample detector, 10-kHz bandwidth) at Eureka, CA, 1995.

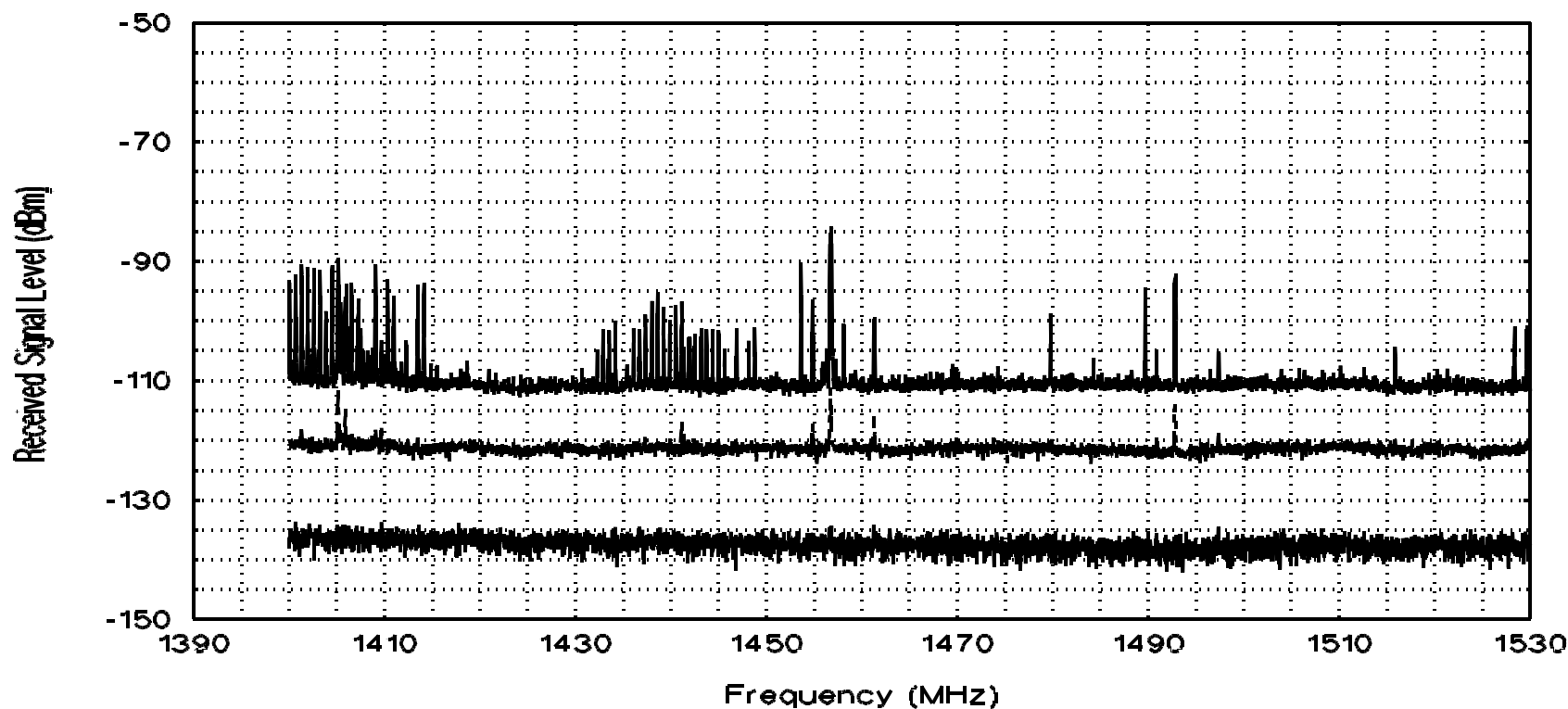


GOVERNMENT ALLOCATIONS:	RADIO ASTRONOMY, 1.	2.	3.	MOBILE.
NON-GOVERNMENT ALLOCATIONS:	RADIO ASTRONOMY, 1.	4.	5.	MOBILE.
GENERAL UTILIZATION:	Passive.			Aeronautical telemetry and telecommand.

1400

1427-1429-1435

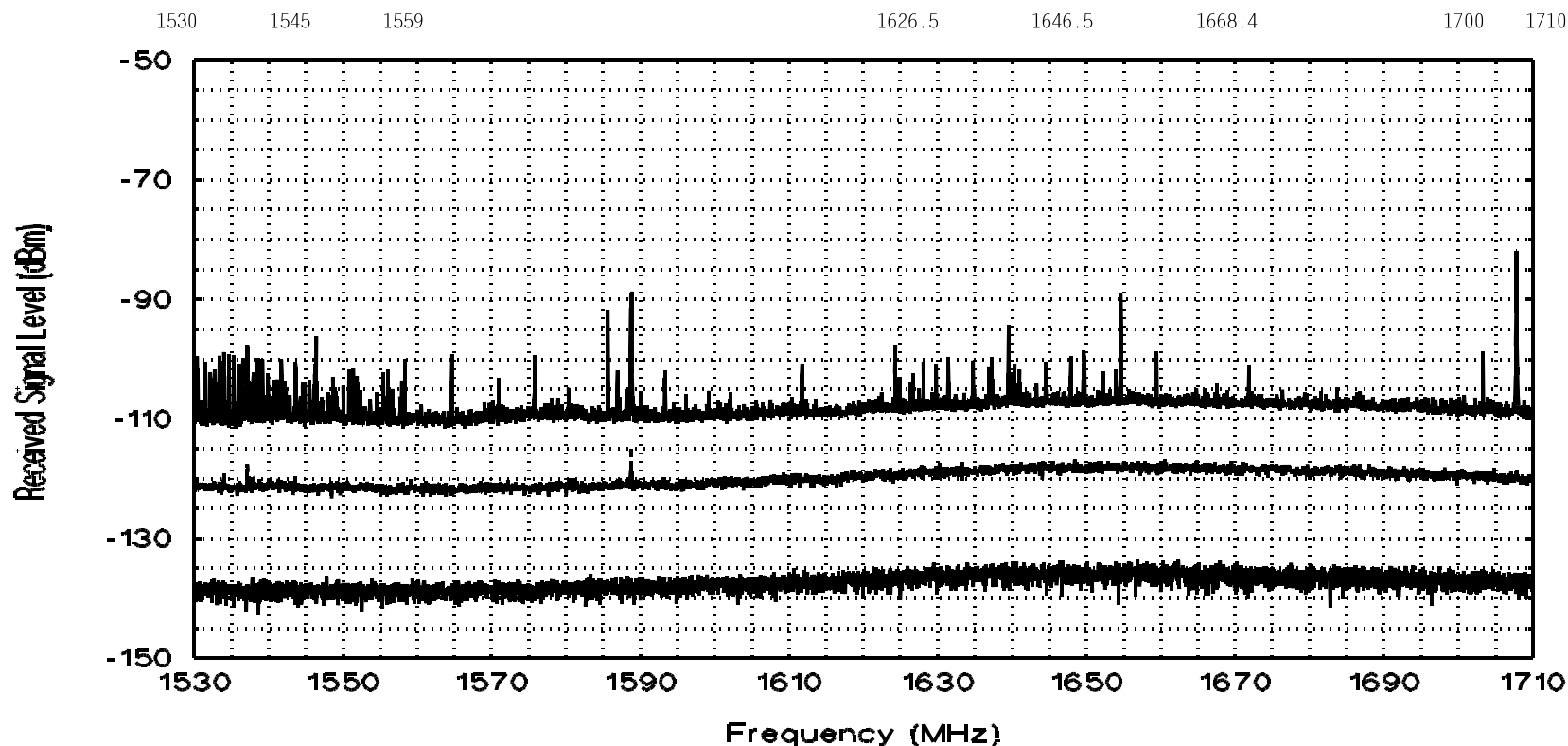
1530



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| <ol style="list-style-type: none"> <li>1. EARTH EXPLORATION-SATELLITE (Passive), SPACE RESEARCH (Passive).</li> <li>2. FIXED, MOBILE (except aeronautical mobile), SPACE OPERATION (Earth-to-space).</li> <li>3. FIXED, MOBILE.</li> </ol> | <ol style="list-style-type: none"> <li>4. SPACE OPERATION (Earth-to-space), Land Mobile (Telemetry and telecommand), Fixed (Telemetry).</li> <li>5. Land Mobile (Telemetry and telecommand), Fixed (telemetry).</li> </ol> |
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Figure B-19. NTIA spectrum survey graph summarizing 1,600 sweeps across the 1400-1530 MHz range (System-2, band event 08, swept/m3 algorithm, sample detector, 30-kHz bandwidth) at Eureka, CA, 1995.

GOVERNMENT ALLOCATIONS:	1.	2.	AERONAUTICAL RADIONAVIGATION, RADIONAVIGATION-SATELLITE (space-to-Earth).	3.	4.	METEOROLOGICAL AIDS, 5.	FIXED, 6.	
NON-GOVERNMENT ALLOCATIONS:	1.	2.	AERONAUTICAL RADIONAVIGATION, RADIONAVIGATION-SATELLITE (space-to-Earth).	3.	4.	METEOROLOGICAL AIDS, 5.	fixed, 6.	
GENERAL UTILIZATION:	INMARSAT.	AMS(R)S.	GPS, GLONASS, (1610-1626.5 MHz Airborne aids to air navigation, only).	INMARSAT.	AMS(R)S.	Radiosondes and satellite imagery.	7.	



1. MARITIME MOBILE-SATELLITE (space-to-Earth), Mobile (1530-1535 MHz, Aeronautical telemetry), MOBILE-SATELLITE (1544-1545 MHz, space-to-Earth, distress and safety only, SARSAT).
2. AERONAUTICAL MOBILE-SATELLITE (R) (space-to-Earth), MOBILE-SATELLITE (space-to-Earth), Mobile-Satellite (space-to-Earth).
3. MARITIME MOBILE-SATELLITE (Earth-to-space), MOBILE-SATELLITE (1645.5-1646.5 MHz, Earth-to-space, distress and safety only).
4. AERONAUTICAL MOBILE-SATELLITE (R) (Earth-to-space), MOBILE-SATELLITE (Earth-to-space), RADIO ASTRONOMY, Mobile-Satellite (Earth-to-space), 1660-1668.4 MHz: RADIO ASTRONOMY, SPACE RESEARCH (passive).
5. RADIO ASTRONOMY, METEOROLOGICAL-SATELLITE (space-to-Earth).
6. METEOROLOGICAL-SATELLITE (space-to-Earth).
7. GOES, TIROS-N.

Figure B-20. NTIA spectrum survey graph summarizing 4,000 sweeps across the 1530-1710 MHz range (System-2, band event 09, swept/m3 algorithm, sample detector, 30-kHz bandwidth) at Eureka, CA, 1995.